

# High Power Polarization Insensitive Optical Isolator

## FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

## APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks

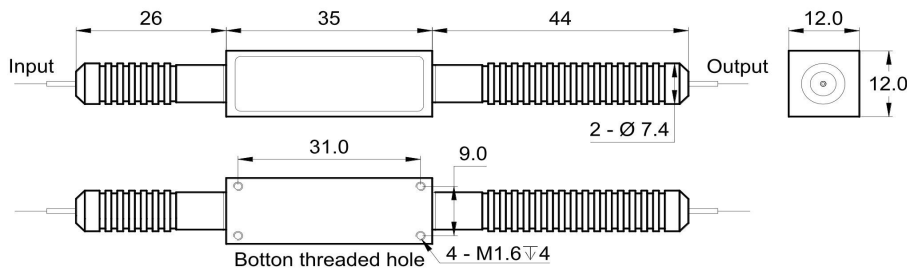


## SPECIFICATIONS

Parameter	Unit	Single Stage	Dual Stage	H Stage
Center Wavelength ( $\lambda_c$ )	nm	1310, 1480, 1550, 1590		
Peak Isolation (Typ.)	dB	42	58	35
Isolation ( $\lambda_c \pm 15\text{nm}$ , 23°C, All SOP)	dB	$\geq 32$	$\geq 45$	$\geq 25$
Insertion Loss ( $\lambda_c$ , 23°C, All SOP)	dB	$\leq 0.35$	$\leq 0.4$	$\leq 0.5$
Insertion Loss ( $\lambda_c \pm 20\text{nm}$ , 0-70°C, All SOP)	dB	$\leq 0.5$	$\leq 0.6$	$\leq 0.8$
Optical Return Loss (Input/Output)	dB	60/55	60/55	55/50
Polarization Dependent Loss	dB	$\leq 0.05$	$\leq 0.10$	$\leq 0.20$
Polarization Mode Dispersion	ps	$\leq 0.25$	$\leq 0.05$	$\leq 0.20$
Fiber Type	-	SMF-28 Fiber or 10/130um DC Fiber (O) 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G)		
Fiber Tensile Load	N	5		
Maximum Optical Power (CW)	W	1, 2, 3, 5, 10		15, 20, 30
Operating Temperature	°C	0~50		
Storage Temperature	°C	-40~85		
Package Dimension	Stainless Steel Tube (SST)	mm	$\phi 5.5 \times L35$ ( $\leq 5\text{W}$ ), $\phi 6.0 \times L50$ ( $> 5\text{W}$ )	
	Metal Box-M	mm	$L120 \times W12 \times H10$	

- Note:**
- SOP= State of Polarization
  - Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.3dB higher, RL is 5dB lower.
  - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  - Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

## PACKAGE DIMENSION (H STAGE)



## ORDERING INFORMATION (PN)

Center Wavelength	Stage	Optical Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
1310-1310nm	S= Single Stage	1-1W	M= Metal Box	O=10/130 DC Fiber	B= Bare Fiber	05=0.5m	N= Without Connector
1550-1550nm	D= Dual Stage	3-3W	Blank for SST	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
1480-1480nm	H= H Stage	10-10W		G=25/300 DC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1590-1590nm		20-20W		Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector

